

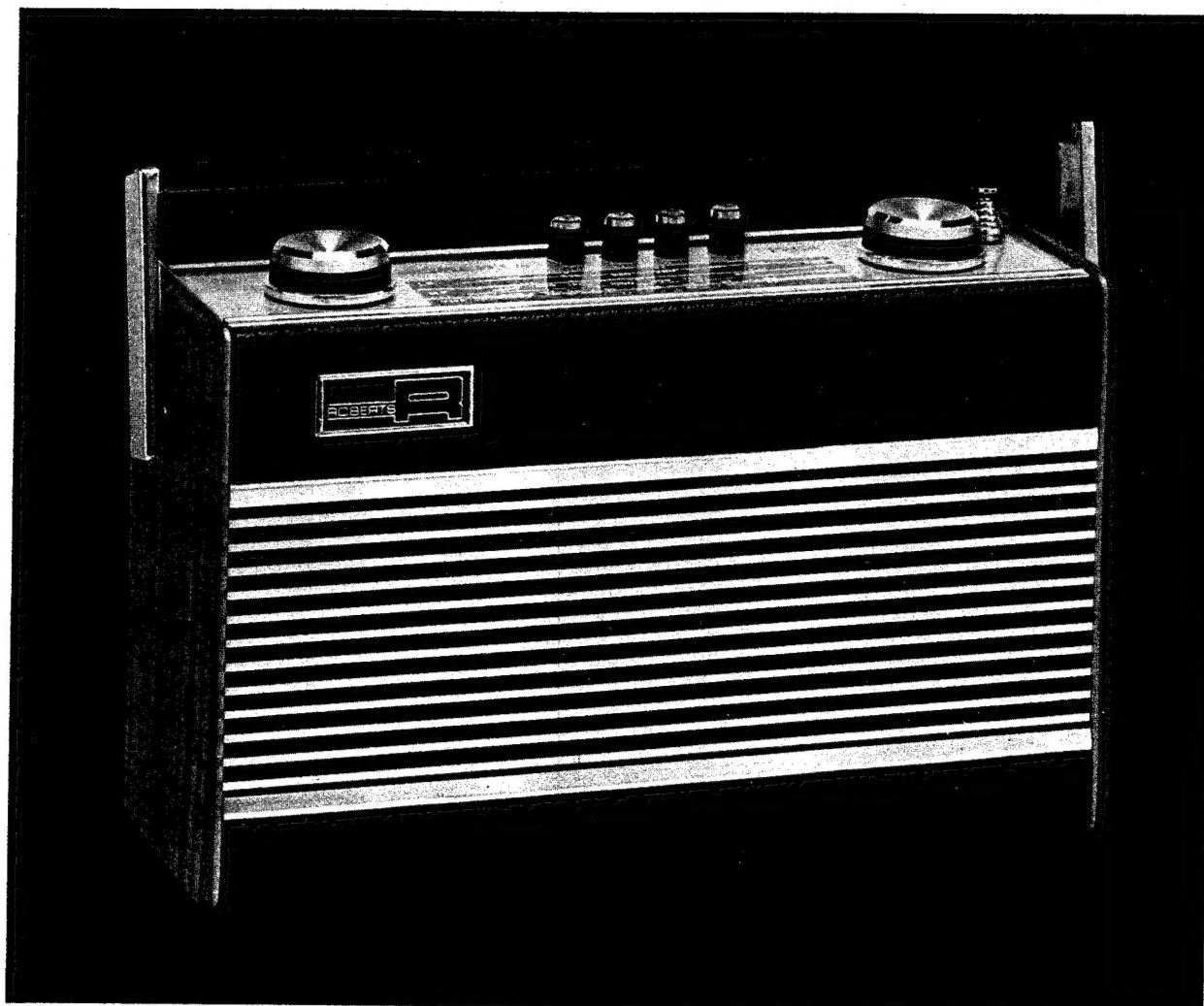


BY APPOINTMENT
TO HER MAJESTY THE QUEEN
RADIO MANUFACTURERS
ROBERTS RADIO CO. LTD.

THE ROBERTS R23

FM/AM Mains Battery Portable

Technical Data



SPECIFICATION

SEMICONDUCTORS

14 transistors
10 diodes

WAVEBAND COVERAGE

MF 530-1620 kHz
LF 150-265 kHz
VHF 87.5-104.5 MHz

POWER OUTPUT

450 mW nominal, continuous sinewave

LOUDSPEAKER

100mm (4.0") round, 8 ohms impedance

BATTERY

9 V PP9 (VT9) type

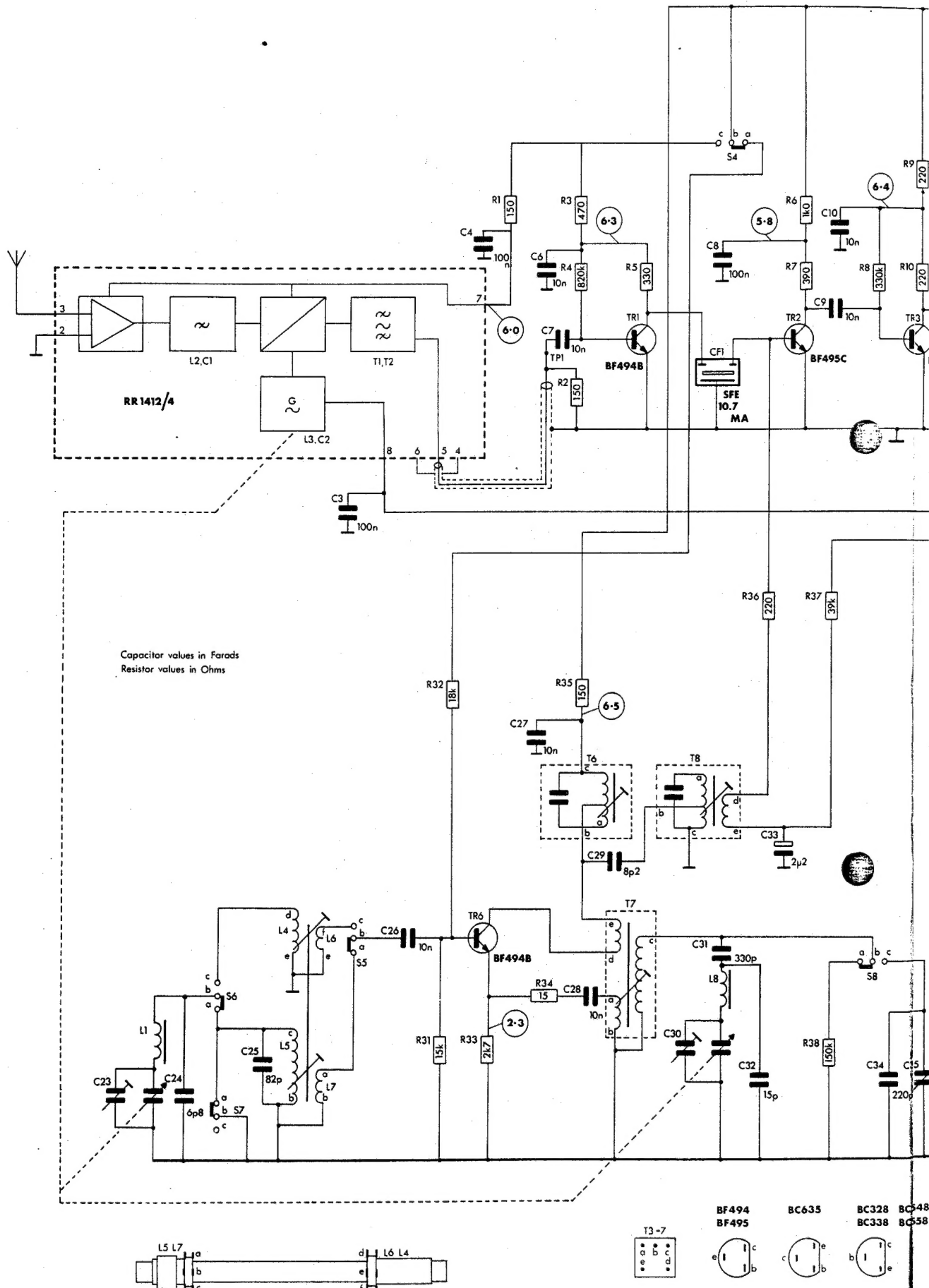
MAINS SUPPLY

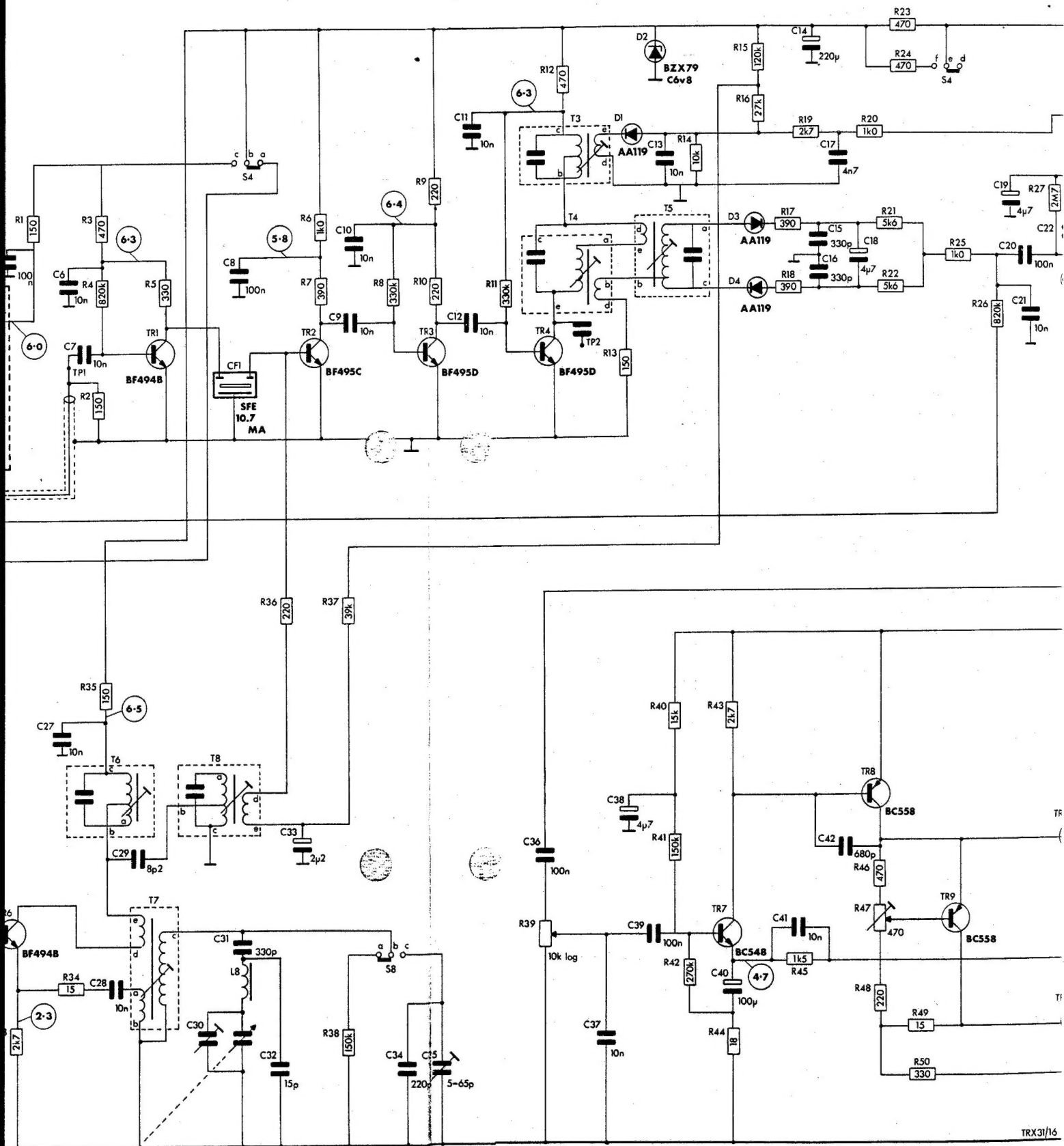
240 V ~ 50 Hz

DISMANTLING

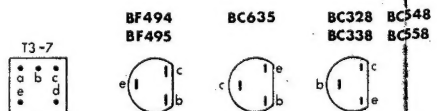
1. Remove screw securing PSU to rear of case. Remove PSU from bottom of case.
2. Remove screws securing fibre strips at either end of case and screw retaining telescopic aerial.
3. Ease complete chassis out from top of case.

CIRCUIT DIAGRAM





TRX31/16

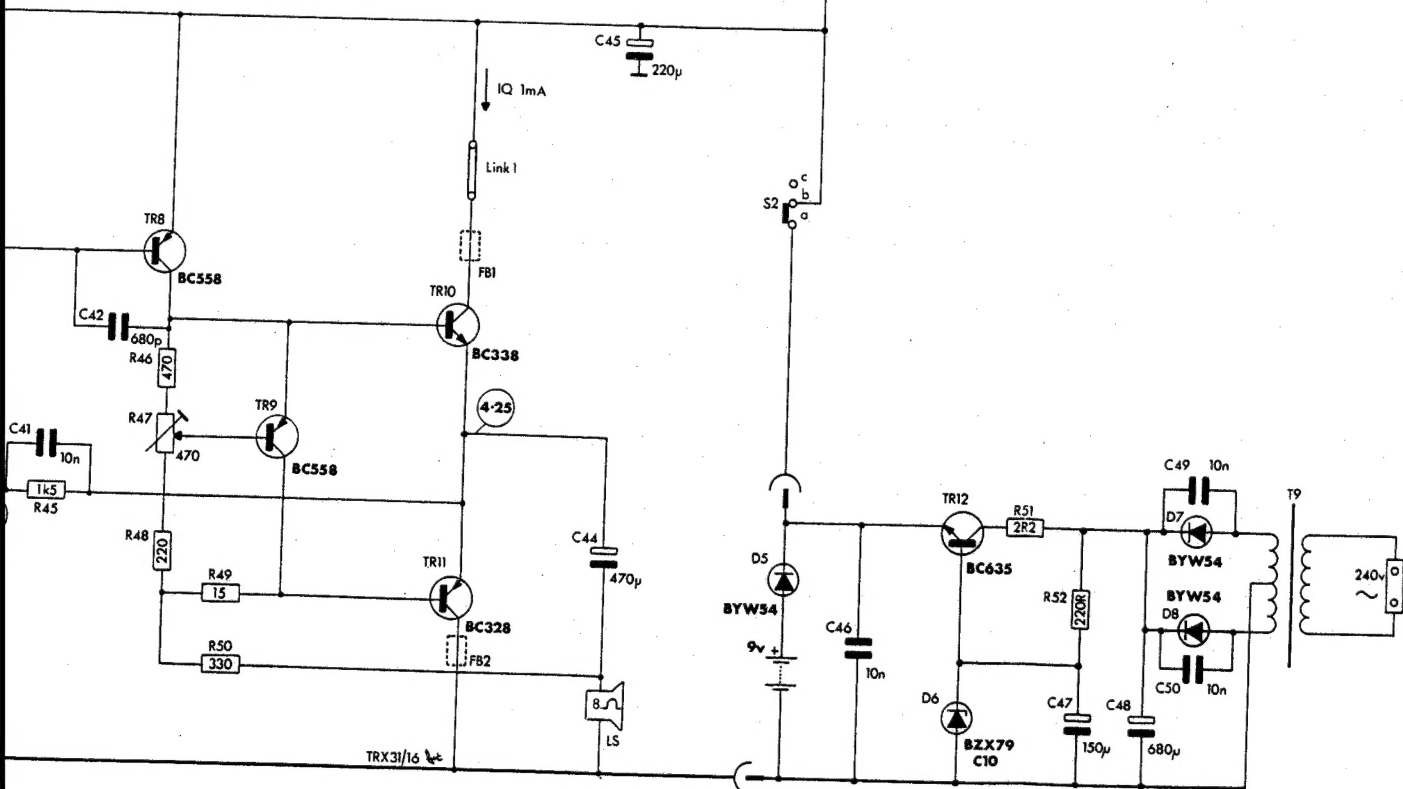
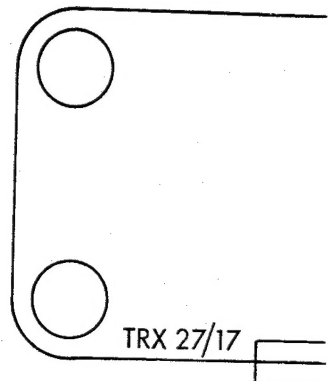
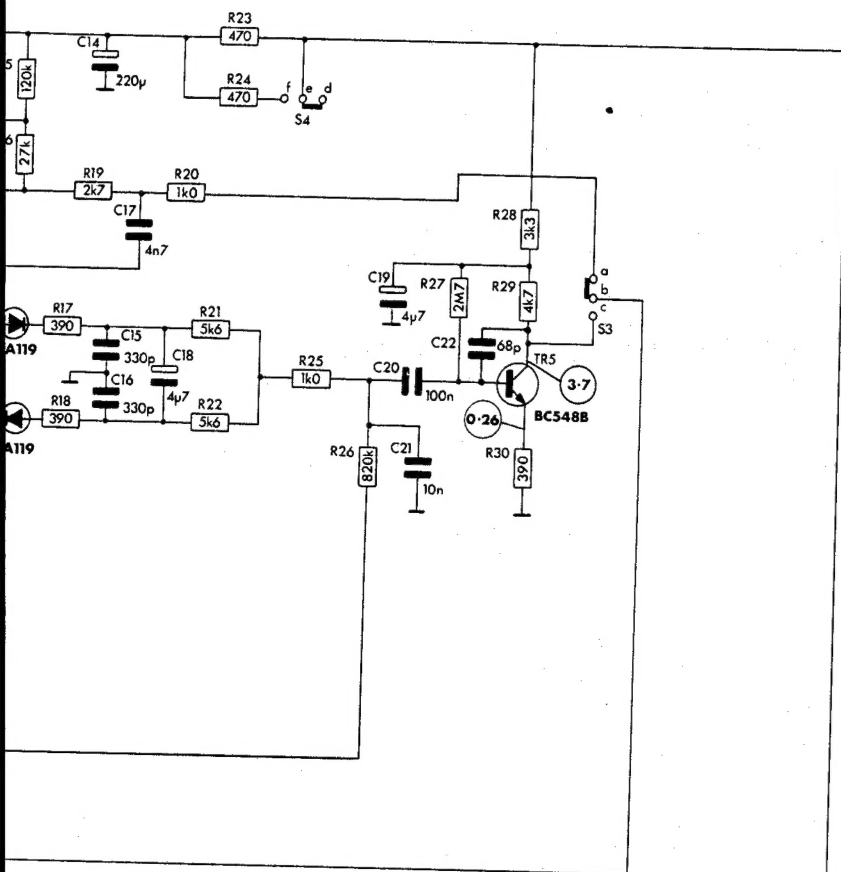


The company reserves the right to amend the specification without notice

Quiescent current: AM 16-20mA
FM 19-25mA

DC voltage measured with respect to -ve supply and shown thus:— (6.8)

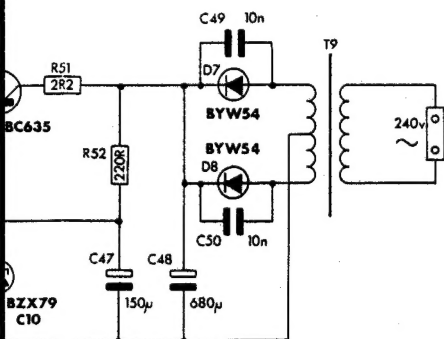
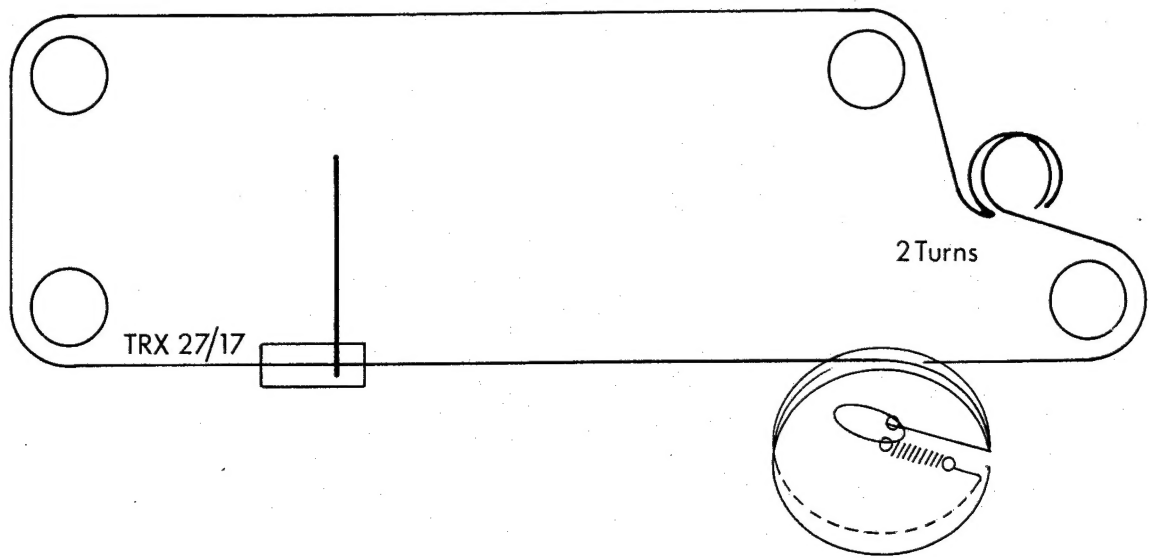
CORD DRIVE DIAGRA



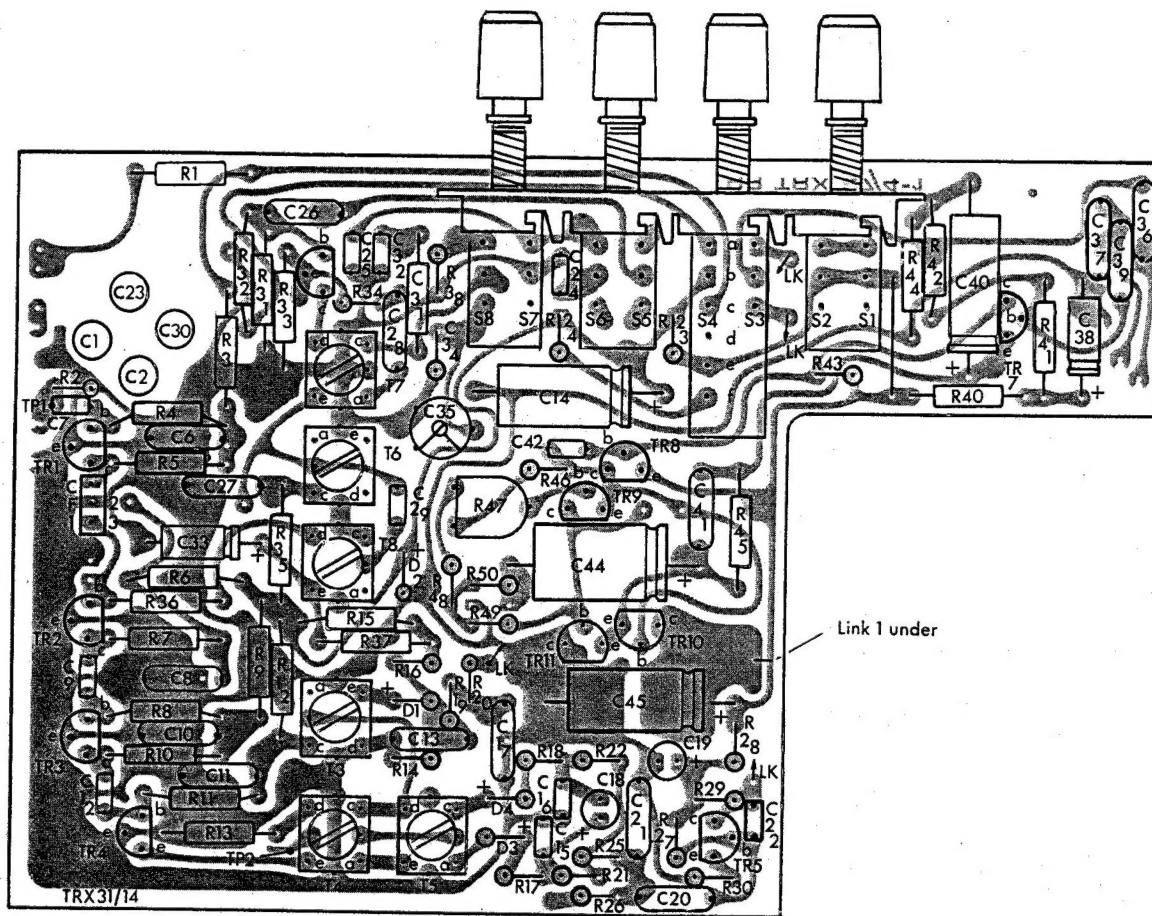
ation without notice

shown thus:— (6.8)

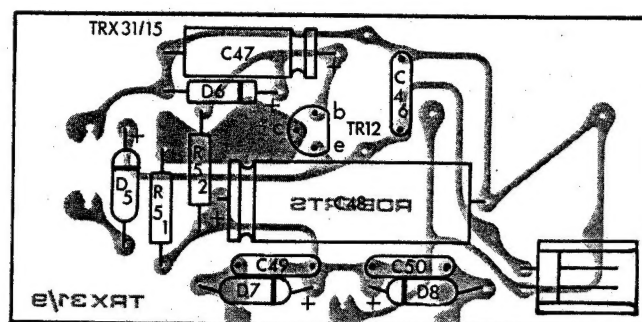
CORD DRIVE DIAGRAM



MAIN BOARD LAYOUT



PSU BOARD LAYOUT



ALIGNMENT

ENSURE:— GANG TO MAX (CLOCK), POINTER COINCIDES WITH DATUM MARKS AT RIGHT HAND END OF SCALE

WAVE-BAND	POINTER	SWEEP/SIGNAL GENERATOR			INDICATOR	CONNECT	ADJUST	INDICATION
		INJECT	FREQUENCY	MOD				
1	—	—	—	—	mA Meter	In series with link 1 under Print Board (Vol Min)	R47	1 mA after 1 min at 20° C
2	MF	Across L4	470 kHz	25 kHz Deviation	O'scope Sensitivity 100 mV/Div	S3a & Chassis	T6, T8, T3	Max O/P & Symmetry Adjust I/P to maintain display height of 5 Divs
3	MF	Via Coupling Loop	1500 kHz	30% AM	O'scope or Output Meter	Across Loudspeaker	C30 & C23	Max O/P
4	MF	As 3	560 kHz	As 3	As 3	As 3	T7 & L4	Max O/P
5	LF	As 3	260 kHz	As 3	As 3	As 3	C35	Max O/P
6	LF	As 3	156 kHz	As 3	As 3	As 3	L5	Max O/P

For 7 & 8 maintain I/P below limiting (—3dB)

7	VHF	—	10.7 MHz*	1 MHz Deviation	O'scope	TP2 via Diode Probe	T4	Max O/P & Symmetry
8	VHF	—	As 7	As 7	As 7	Junction R25 & R26 & Chassis	T5	S Curve Zero Crossing at Centre of IF —3dB Bandwidth

* The actual IF is determined by the Ceramic Resonator